

More than just a POS, you think

SlimPOS

User's MANUAL



INDEX

Chapter 1. Caution.

Product quality guarantee	4
Copyright	5
Disclaimer	6
Trademark recognition	7
Federal Communication Commission	8
Declaration of conformity	9
Caution for safety	10

Chapter 2. Product Overview.

Check the contents	12
Option device	12
Each part of main body name	13
Front image.....	13
Rear image	13
Rear connection I/O	14
Customer Display (VFD) installation	15
Second Display installation	15

Chapter 3. BIOS Setup Utility

BIOS set up utility	17
BIOS menu screen	19
Standard CMOS features	20
Advance BIOS features	21
Advance chipset features	22
Integrated peripherals	23
Power Management set up	29
PnP/PCI configurations	31
PC Health Status	32
Load set up defaults	33
Set passwords	34
Save & Exit setup option	35
Exit without saving	36

Chapter 4. Trouble shooting

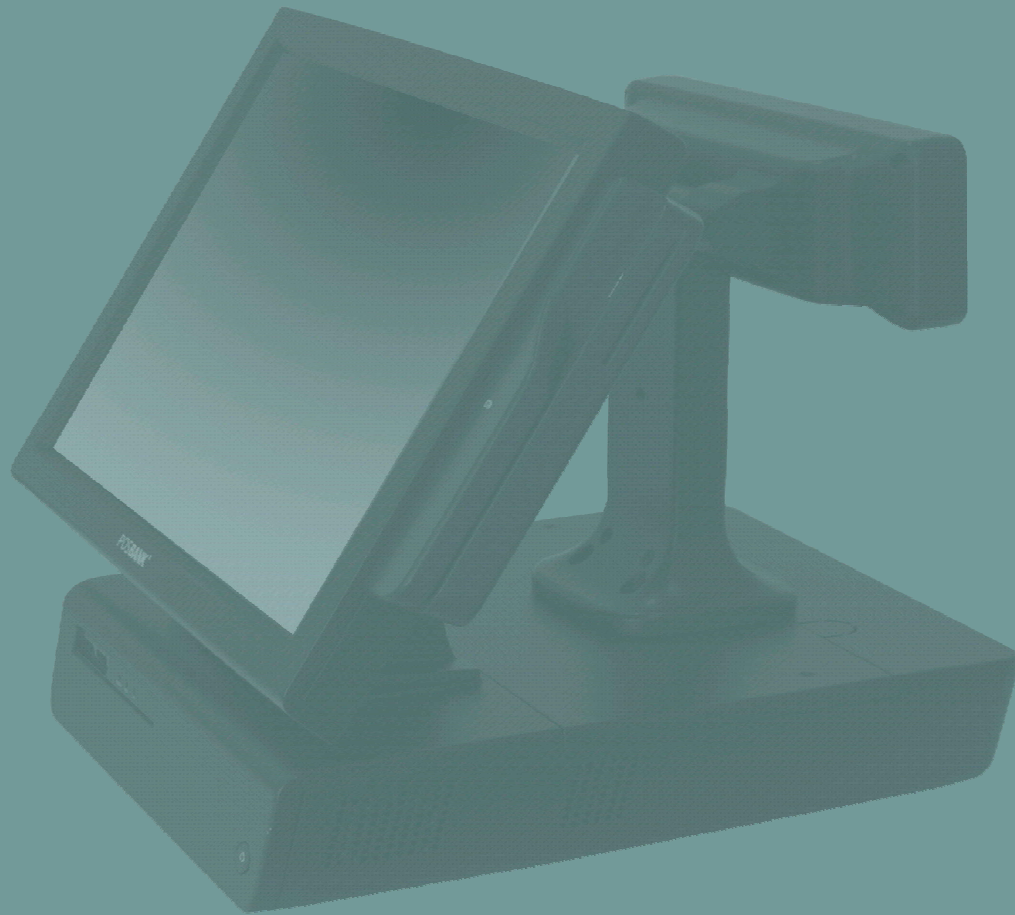
General checkout guidelines	38
Power system checkout	38
Network symptom	39
MSR symptom	39
USB symptom.....	39
Cash drawer symptom	40
LCD screen symptom	40
Touch screen symptom	40
Power symptom	41
PS/2 KB symptom	41
Boot symptom	41

Chapter 5. Mainboard Jumper Setting

Motherboard and deeps.....	43
location description	

Chapter 6. Replacing Parts

Safety and Precautions	47
Before you Begin	48
Remove rear cover method	49
Replace motherboard method	50
Replace MSR method	53
Replace memory method	54
Replace Heatsink & FAN method	55
Replace CUP method	56
Replace HDD method	57
Remove power supply method	58
Replace monitor method.....	59
Replace LCD panel, mother board,	60
touch screen methods	
Reference to upgrade	63
Power supply	63
Specifications	64



Chapter 1.

Caution.



Product quality guarantee

POSBANK warrants our hardware POS terminal product and its parts against defects in materials and workmanship under normal use for a standard period of two (2) year from the date of original purchase.

During this period, POSBANK will repair or replace a defective product or part without charge for parts and labor to the purchaser.

The 1st year is free workmanship and new or refurbished replacement parts with one-way freight cost born by POSBANK and customer shall be responsible for send shipping charge.

2nd year is also no charge for workmanship and parts but limited warranty with round-way freight cost born by customer.

Products outside of the warranty period or scope shall be diagnosed at customer's expense.

POSBANK will require customer's repair and payment authorization to proceed with any repairs.



Copyright.

This publication, including all photographs, illustrations and software, is protected under international copyright laws, with all rights reserved. Neither this manual, nor any of the material contained herein, may be reproduced without written consent of the author.



Disclaimer.

The information in this document is subject to change without notice.

The manufacturer makes no representations or warranties with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose.

The manufacturer reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of the manufacturer to notify any person of such revision or changes.

Trademark recognition

All product names used in this manual are the properties of their respective owners and are acknowledged.

Federal communications commission (FCC)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected.

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device.

Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

Declaration of conformity

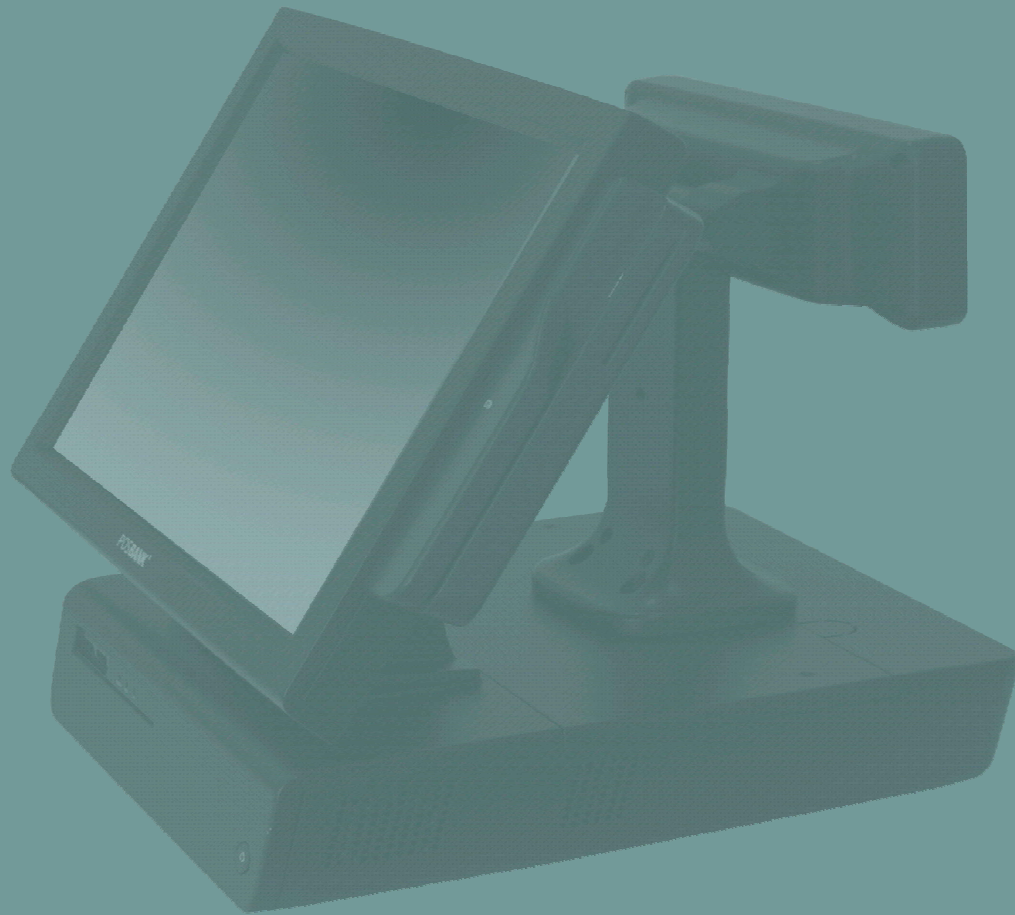
This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.



Caution for safety.

- Specifications are subject to change without notice.
 - Avoid exposing the product to direct sunlight and do not use the product near area of high moistures.
 - Do not block the unit's ventilation openings.
 - Do not attempt to disassemble or modify this product by yourself, as doing so may expose you to an electric shock.
 - All servicing should be performed by qualified personnel and should confirm to all local codes.
-
- If and abnormal power conditions or blackouts occur during operation, disconnect unit at the AC source immediately.
 - Once normal power is restored, reconnect the AC source.
 - To avoid unit failure or intermittent operation, check power and other I/O cables are connected correctly.
 - Always unplug the power cord from the AC outlet before cleaning the product. Use a soft cloth to clean the product. Do not use solvents or abrasives and do not spray or pour any liquid directly onto product's screen or case.

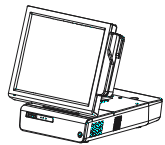


Chapter 2.

Product overview

>> Check the contents

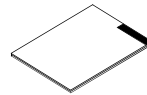
1. The following items are included when you purchased this product.
2. If any of these items are damaged or missing, contact your dealer for assistance.



POS MAIN BODY



POWER CORD



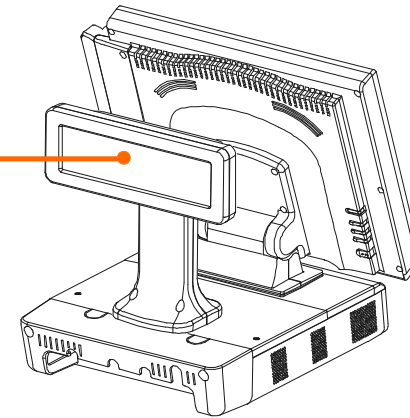
USER'S MANUAL,



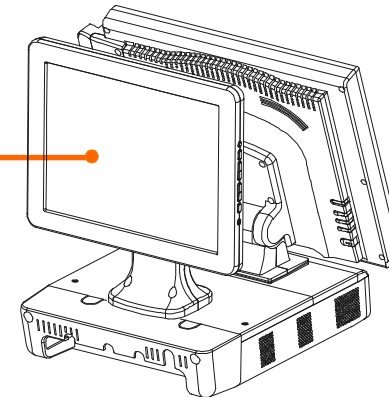
DRIVER CD

3. Optional Parts

Customer display
with stand

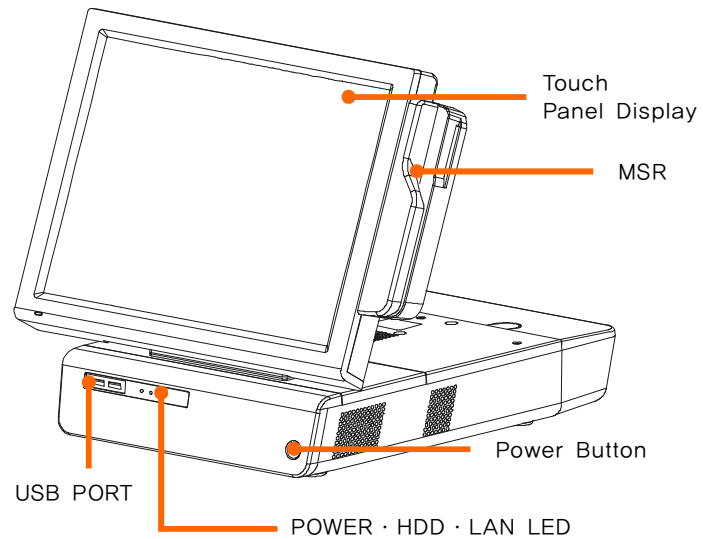


second display
with stand

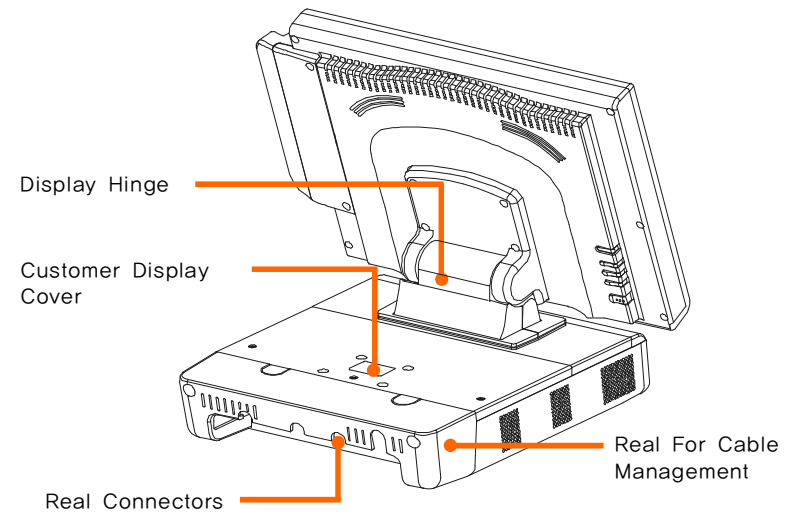


>> Each part of main body name

FRONT VIEW

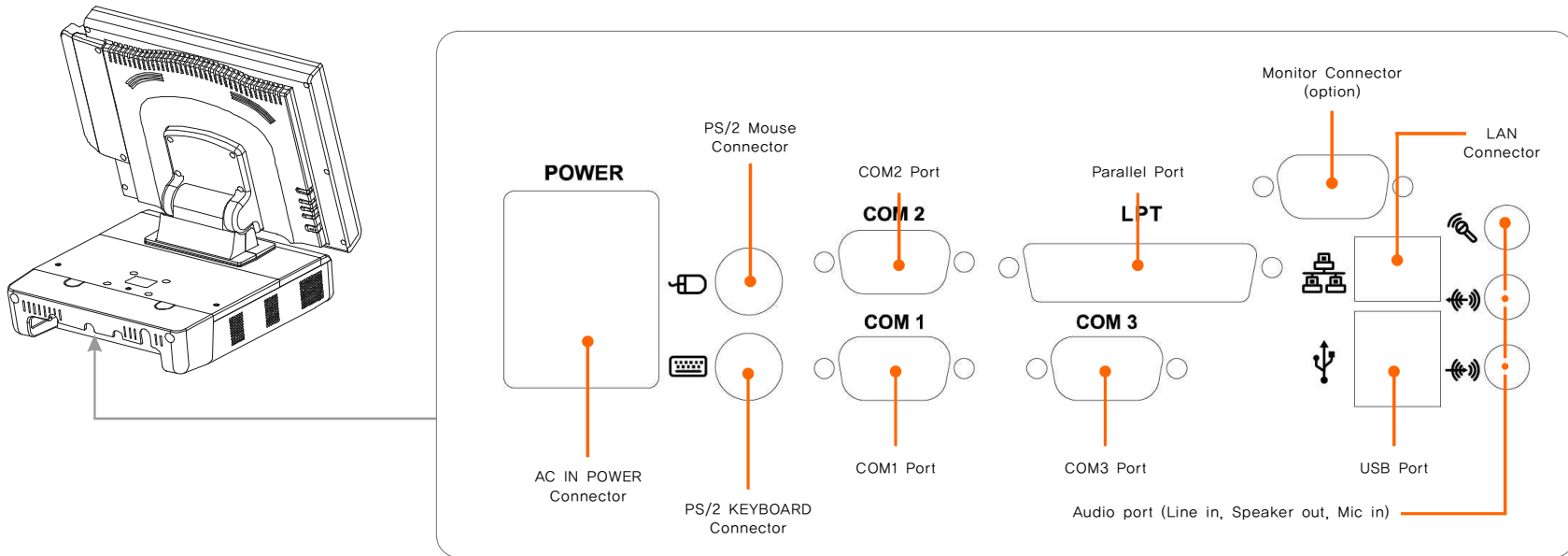


REAR VIEW



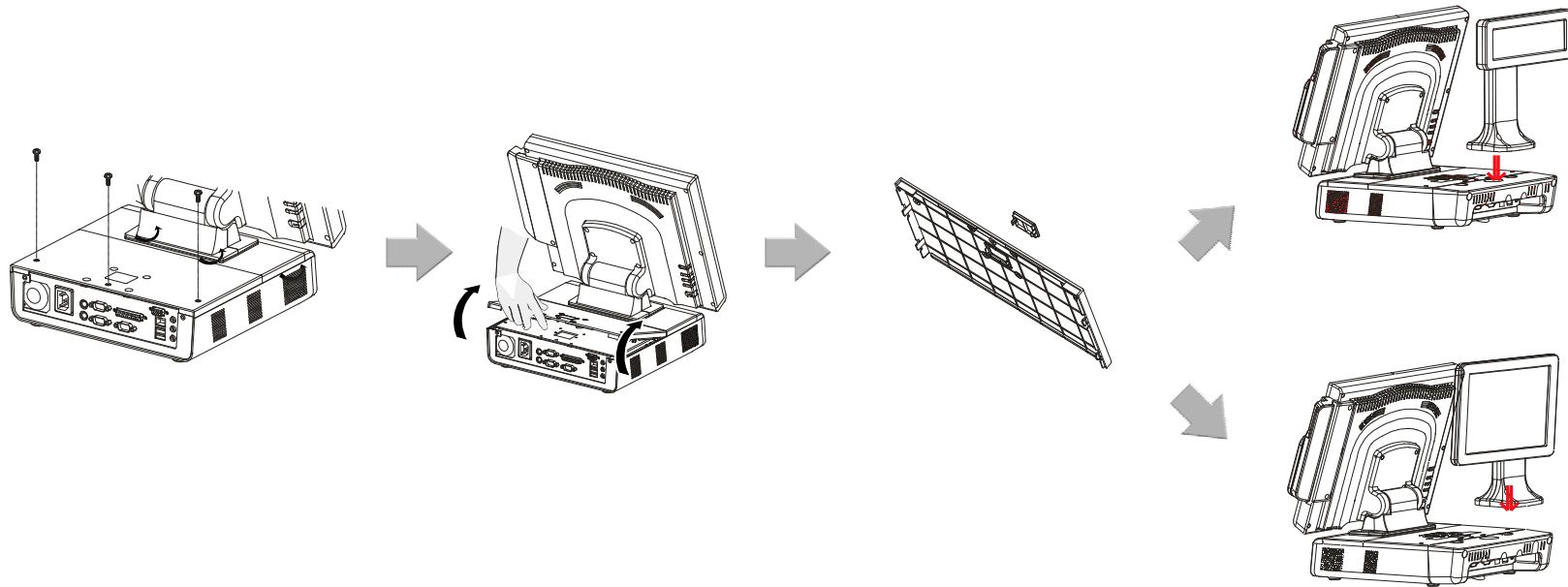
>> Each part of main body name

Rear Connectors I/O



>> Option parts installation

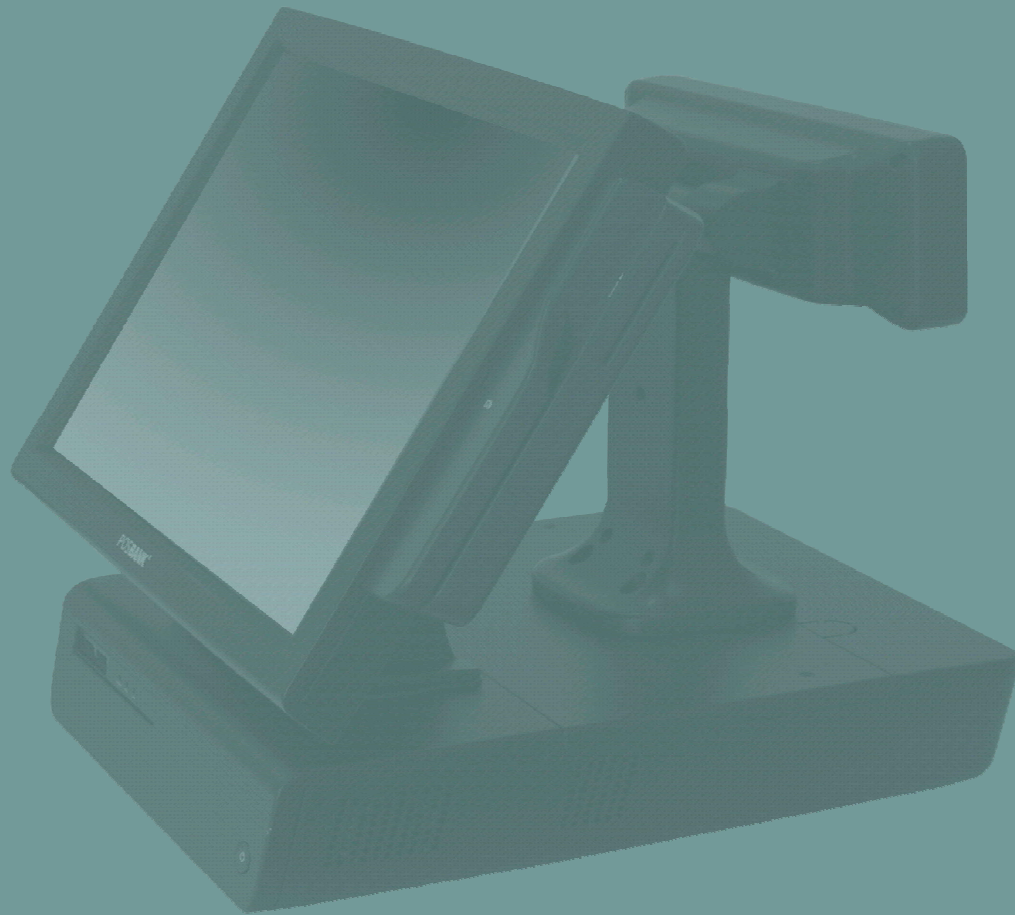
Customer Display(VFD) & 2nd Monitor Installation



Connect the display cable and insert VFD(2nd Monitor) set,
use 4 screws to secure the VFD(2nd Monitor) set,
VFD(2nd Monitor) is connected to internal COM4.

Caution;

To install or withdraw VFD(2nd Monitor), power must be switch off.



Chapter 3.

BIOS Setup Utility

>> Bios setup utility

This motherboard supports a programmable firmware chip that you can update using the provided utility. Use the BIOS Setup program when you are installing a motherboard, reconfiguring your system, or prompted to "Run Setup." This section explains how to configure your system using this utility. Even if you are not prompted to use the Setup program, you can change the configuration of your computer in the future. For example, you can enable the security password feature or change the power management settings. This requires you to reconfigure your system using the BIOS Setup program so that the computer can recognize these changes and record them in the CMOS RAM of the firmware hub. The firmware hub on the motherboard stores the Setup utility. When you start up the computer, the system provides you with the opportunity to run this program. Press **** during the Power-On-Self-Test(POST) to enter the Setup utility; otherwise, POST continues with its test routines. If you wish to enter Setup after POST, restart the system by pressing **<Ctrl+Alt+Delete>**, or by pressing the reset button on the system chassis. You can also restart by turning the system off and then back on. Do this last option only if the first two failed. The Setup program is designed to make it as easy to use as possible. Being a menu-driven program, it lets you scroll through the various sub-menus and make your selections from the available options using the navigation keys.



- The default BIOS settings for this motherboard apply for most conditions to ensure optimum performance. If the system becomes unstable after changing any BIOS settings, load the default settings to ensure system compatibility and stability. Select the Load Optimized Defaults from the BIOS menu screen.
- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.

>> Bios setup utility

The keys in the legend bar allow you to navigate through the various setup menus

Key(s)	Function Description
F1	General help, only for Status Page Setup Menu and Option Page Setup Menu
Esc	Return to the main menu from a submenu or prompts you to quit the setup program.
←, →	Move to the item in the left or right hand
↑, ↓	Move to previous or next item
Enter	Brings up a selection menu for the highlighted field.
+ or PgUp	Moves the cursor to the first field
– or PgDn	Moves the cursor to the last field
(Shift) F2 key	Change color from total 16 colors, F2 to select color forward, (Shift) F2 to select color backward
F5	Loads the previous values
F6, F7	Loads the fail–safe / optimized defaults
F10	Saves changes and exits Setup

>> Bios setup utility

BIOS Menu Screen

When you enter the BIOS, the following screen appears.

The BIOS menu screen displays the items that allow you to make changes to the system configuration.

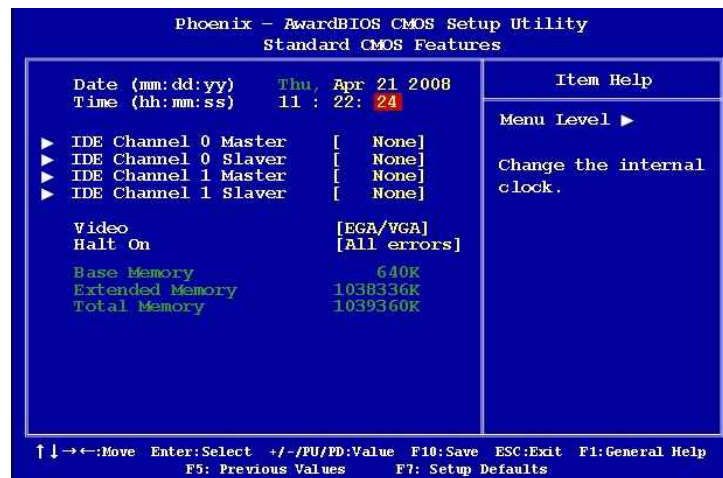
To access the menu items, press the up/down/right/left arrow key on the keyboard until the desired item is highlighted, then press [Enter] to open the specific menu.



>> Bios setup utility

Standard BIOS Features.

The Standard CMOS Features screen gives you an overview of the basic system



Halt On

Set the system to halt on errors according to the system functions specified in each option.

Configuration options: [All Errors] [No Errors] [All, But Keyboard]

Date [Day, xx/xx/xxxx]

The date format is <week>, <month>, <day>, <year>.

Time [xx:xx:xx]

The time format is <hour><minute><second>, based on the 24-hour clock.

IDE Channel 0/1 Master / Slave

– IDE HDD Auto–Detection : [Press Enter] to select this option for automatic device detection.

– IDE Primary Master :

[Auto]: Automatically detects IDE devices during POST

[None]: Select this when no IDE device is used.

The system will skip the auto–detection setup to make system start up faster.

[Manual]: User can manually input the correct settings.

– Access Mode: The options are CHS/LBA/Large/Auto

– Capacity: Capacity of currently installed hard disk

– Cylinder: Number of cylinders

– Head: Number of heads

– Precomp: Write precomp

– Landing Zone: Landing zone

– Sector: Number of sectors

Video

This category detects the type of adapter used for the primary monitor that must match your video display card and monitor.

– EGA / VGA: Enhanced Graphics Adapter/Video Graphics Array.

For EGA, VGA, SVGA, or PGA monitor adapters.

– CGA 40: Color Graphics Adapter, power up in 40 column mode.

– CGA 80: Color Graphics Adapter, power up in 80 column mode.

– MONO: Monochrome adapter includes high resolution monochrome adapters.

>> Bios setup utility

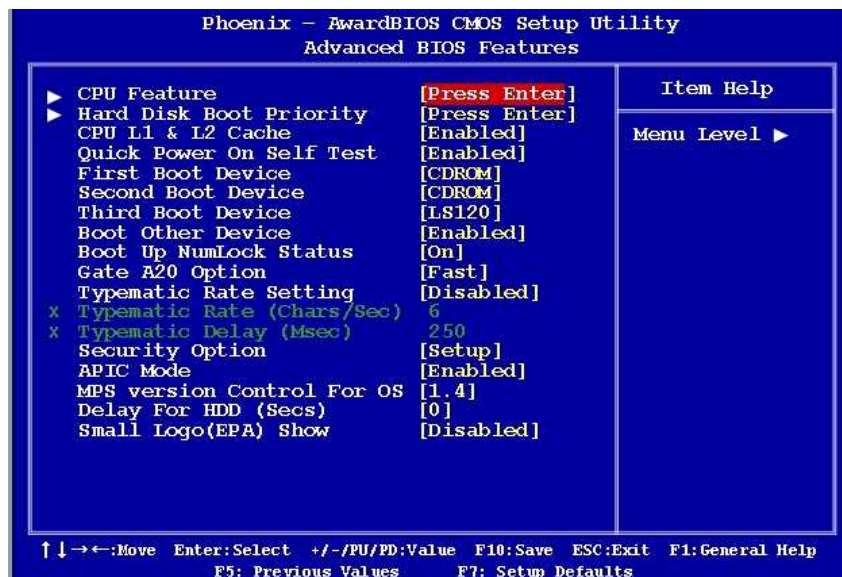
Advanced BIOS Features.

The "Advanced BIOS Features" screen appears when choosing the "Advanced BIOS Features" item from the "Initial Setup Screen" menu. It allows the user to configure the motherboard according to his particular requirements.

Below are some major items that are provided in the Advanced BIOS Features screen.

A quick booting function is provided for your convenience.

Simply enable the Quick Booting item to save yourself valuable time.



CPU Features

This item allows you to setup the CPU thermal management function.

Delay Prior to Thermal

With the default value of 16 Minutes, the BIOS activates the Thermal Monitor in automatic mode 16 minutes after the system starts booting up. The options: [4 Min], [8 Min], [16 Min], [32 Min].

Hard Disk Boot Priority

Set hard disk boot device priority.

CPU L 1 & L2 Cache

Enabling this feature speeds up memory access.

Quick Power On Self Test

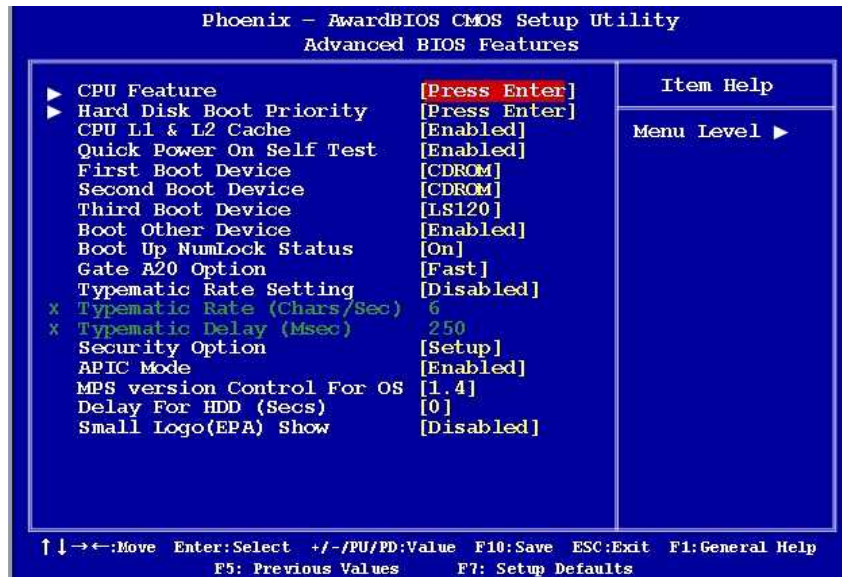
This allows the system to skip certain tests to speed up the boot-up procedure.

First / Second / Third Boot Device

The BIOS tries to load the OS from the devices in the sequence set here.

>> Bios setup utility

Advanced BIOS Features.



Boot Other Device

Use this to boot another device. The options are "Enabled" and "Disabled"

Boot Up NumLock Status

Set the boot up Num Lock status. The options are "On" and "Off" .

Gate A20 Option

Normal : A pin in the keyboard controller controls GateA20
Fast : Lets chipset control GateA20 (Default)

Typematic Rate Setting

The typematic rate is the rate key strokes repeat as determined by the keyboard controller.

The commands are "Enabled" or "Disabled".

Enabling allows the typematic rate and delay to be selected.

Security Option

This category determines whether the password is required when the system boots up or only when entering setup. The options are:

- System : The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.
- Setup : The system will boot, but access to Setup will be denied if the correct password is not entered at the prompt.

APIC Mode

This setting allows you to enable the APIC mode.
The choices are "Disabled" or "Enabled"

MPS Version Control for OS

This option is only valid for multiprocessor motherboards as it specifies the version of the Multiprocessor Specification (MPS) that the motherboard will use.

The MPS is a specification by which PC manufacturers design and build Intel architecture systems with two or more processors. MPS 1.1 was the original specification.

MPS version 1.4 adds extended configuration tables for improved support of multiple PCI bus configurations and greater expandability in the future.

In addition, MPS 1.4 introduces support for a secondary PCI bus without requiring a PCI bridge.

Delay for HDD (Secs)

The default is [0].

Small Logo (EPA) Show

This item allows you enabled/disabled the small EPA logo show on screen at the POST step.

>> Bios setup utility

Advanced Chipset Features.



DRAM Timing Selectable

This item allows you to select the DRAM timing value by SPD data or Manual by yourself. The choices: Manual, By SPD.

System BIOS Cacheable

Selecting "Enabled" allows caching of the system BIOS ROM at F0000h– FFFFFh, resulting in better system performance. However, if any program writes data to this memory area, a system error may occur. The Choices are "Enabled" and "Disabled"

Video BIOS Cacheable

This feature is only valid when the video BIOS is shadowed. It enables or disables the Caching of the video BIOS ROM at C0000h–C7FFFh via the L2 cache. This greatly speeds up accesses to the video BIOS. However, this does not translate into better system Performance because the OS bypasses the BIOS using the graphics driver to access the video card's hardware directly. The Choice: Enabled, Disabled.

Memory Hole at 15M–16M

Enabling this feature reserves 15 MB to 16 MB memory address space for ISA expansion cards that specifically require this setting. This makes memory from 15 MB and up unavailable to the system. Expansion cards can only access memory up to 16 MB. The default setting is "Disabled"

On–Chip Frame Buffer Size

The On–Chip Frame Buffer Size can be set to 1 MB or 8 MB. This memory is shared with the system memory.

DVMT Mode

Use this field to select the memory to allocate for video memory. The choices are "Fixed", "DVMT" and "BOTH".

DVMT/FIXED Memory Size

Specify the size of DVMT/system memory to allocate for video memory. The options: [64MB], [128MB]

Boot Display

The options: [Auto], [CRT], [LFP], [CRT+LFP], [DVI]

Panel Number The options:

[640x480 18bit] [800x600 18bit] [1024x768 18bit] [1280x1024 18bit/2] [1400x1050 18bit/2] [1400x1050 18bit/2] [1600x1200 18bit/2] [1280x768 18bit] [1680x1050 18bit/2] [1920x1200 18bit/2] [1024x768 18bit/2] [1024x768 24bit] [1024x768 18bit] [1280x800 24bit] [1280x600 18bit] [2048x1536 18bit/2]

>> Bios setup utility

Integrated Peripherals

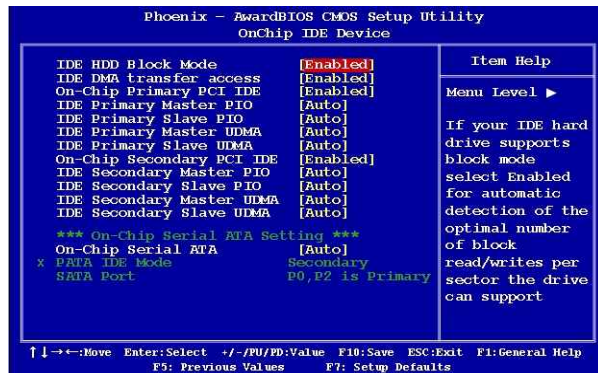
Use this menu to specify your settings for integrated peripherals.



>> Bios setup utility

Integrated Peripherals

[On Chip IDE Device]



On-Chip Serial ATA

The chipset contains a SATA IDE interface with support for two IDE channels. Select Enabled to activate the primary IDE interface (Channel0). Select Disabled to deactivate this interface. The options: Disabled, Auto, Combined Mode, SATA Only.

IDE HDD Block Model

If the IDE hard drive supports block mode select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support.

IDE DMA Transfer Access

Use this field to enable or disable IDE DMA transfer access.

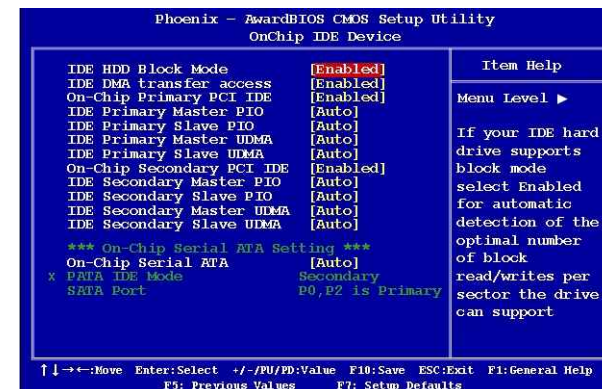
On-Chip Primary / Secondary PCI IDE

The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the primary / secondary IDE interface. Select Disabled to deactivate this interface. The options: [Enabled], [Disabled]

IDE Primary/Secondary Master/Slave PIO/UDMA

The channel has both a master and a slave, making four IDE devices possible. Because two IDE devices may have a different Mode timing (0, 1, 2, 3, 4), it is necessary for these to be independent. The default setting "Auto" will allow auto detection to ensure optimal performance.

[Onboard Device]



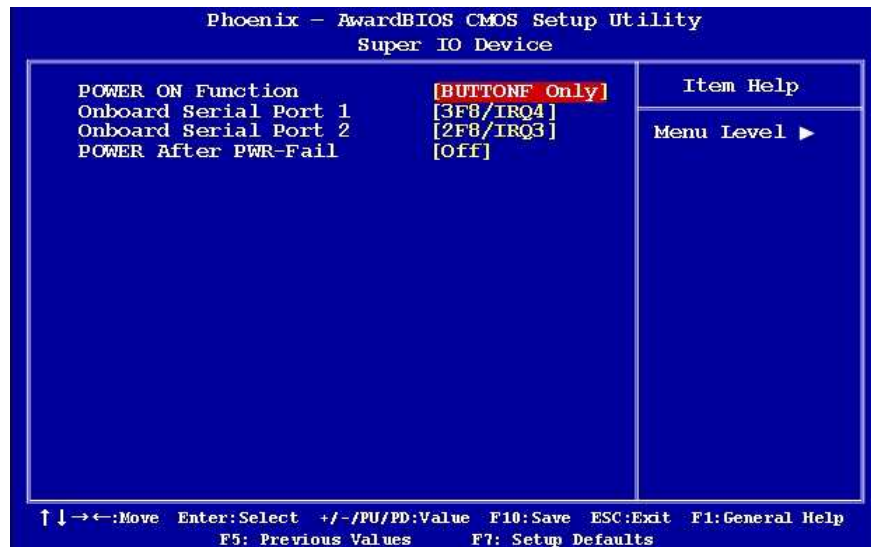
Azalia/AC97 Audio Select

This item allows you to Enabled/Disabled Azalia/AC97 chipset. The options: Auto, AC97 Audio only, Disabled.

>> Bios setup utility

Integrated Peripherals

[Super I/O Device]



Power ON Function

This feature allows you to wake up the system using any of the listed options. The options: [Mouse Left], [Mouse Right], [Any KEY], [Button Only].

Onboard Serial Port

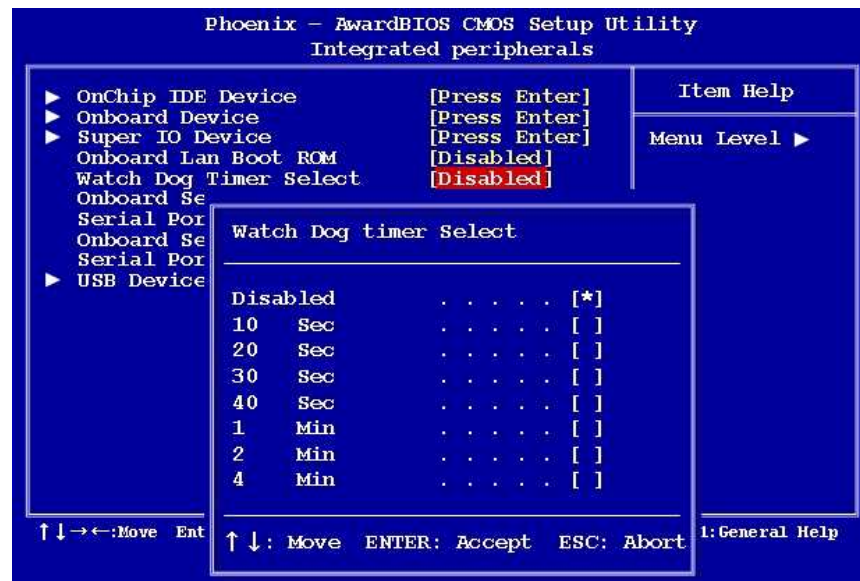
Select an address and corresponding interrupt for the first and second serial ports. The choice: [Disabled], [3F8/IRQ4], [2F8/IRQ3], [3E8/IRQ4], [2E8/IRQ3]

POWER After PWR-fail

The options are [off], [on].

>> Bios setup utility

Integrated Peripherals



Onboard LAN Boot ROM

The options are [disabled], [enable].

Watch Dog Timer Select

This option will determine watchdog timer.

The choices: Disabled, 10, 20, 30, 40 Sec, 1, 2, 4 Min.

Onboard Serial Port 3

Select an address and corresponding interrupt for the serial ports.

The choice: [Disabled], [3F8], [2F8], [3E8], [2E8].

Serial Port 3 Use IRQ

Select an IRQ for the serial ports.

The options: IRQ3, IRQ4, IRQ5, IRQ7, IRQ10, IRQ11

Onboard Serial Port 4

Select an address and corresponding interrupt for the serial ports.

The choice: [Disabled], [3F8], [2F8], [3E8], [2E8].

Serial Port 4 Use IRQ

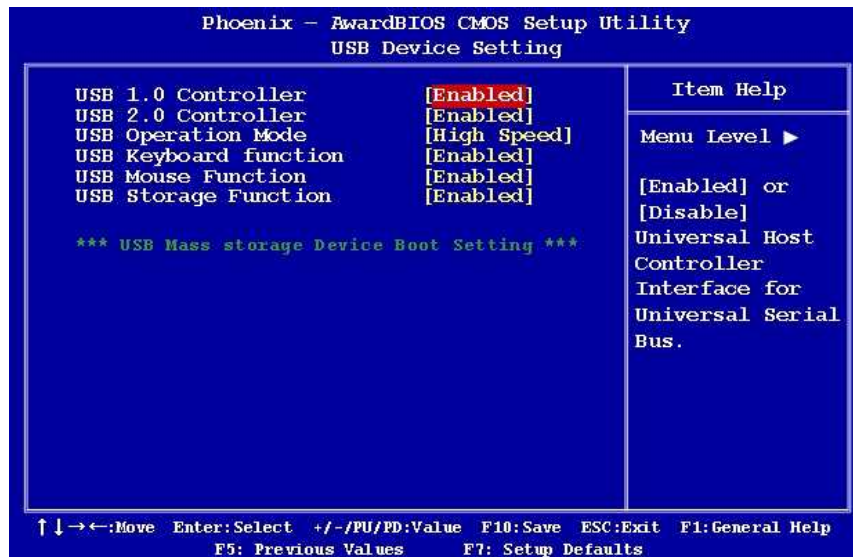
Select an IRQ for the serial ports.

The options: IRQ3, IRQ4, IRQ5, IRQ7, IRQ10, IRQ11

>> Bios setup utility

Integrated Peripherals

[USB Device Setting]



USB 1.0 / 2.0 Controller

The choices: Disabled, Enabled.

USB Operation Mode

Allow you to configure the USB 2.0 controller in HiSpeed (480 Mbps) or Full Speed (12 Mbps).

Configuration options: [Full/Low Speed] [HiSpeed]

USB Keyboard Function

The choices: Disabled, Enabled.

USB Mouse Function

The choices: Disabled, Enabled.

USB Storage Function

The choices: Disabled, Enabled.

>> Bios setup utility

Power Management Setup.

The power management setup controls the single board computer's "green" features to save power. The following screen shows the manufacturer's defaults.



MODEM Use IRQ

This determines the IRQ in which the MODEM can use. The choices: NA, 3, 4, 5, 7, 9, 10, 11.

Suspend Mode

The item allows to set the number of minutes before the system enters suspend mode.

HDD Power Down

Select "1-15 mins." to enable HDD Power Down mode between 1 to 15 mins. Select "Disabled" to disable HDD Power Down function.

Soft-off by PWR-BTTN

If you choose "Instant-Off", then pushing the ATX soft power switch button once will switch the system to "system off" power mode. You can choose "Delay 4 sec". If you do, then pushing the button for more than 4 seconds will turn off the system, whereas pushing the button momentarily (for less than 4 seconds) will switch the system to "suspend" mode.

ACPI Function

The choices are "Enabled" and "Disabled".

ACPI Suspend Type

This item allows you to set ACPI suspend type to S1/POS(Power On Suspend) or S3/STR (Suspend To RAM).

Run VGABIOS if S3 Resume

Select "Auto" to run VGA BIOS if S3 resume automatically. The "Yes" enables running VGA BIOS if S3 resume. The "No" disables this function.

Power Management

There are three selections for Power Management, and each of them has fixed mode settings

Video OFF Method

Use this to select the method to turn off the video.

Video OFF In Suspend

When the system is in suspend mode, the video will turn off.

Suspend Type

Select the suspend type. The choice: Stop Grant, Pwron suspend.

>> Bios setup utility

Power Management Setup.



Wake-Up by PCI Card

This will enable the system to wake up through PCI/LAN peripheral.
The choices: Enable, Disabled.

Power On by Ring

Select "Enabled" to power on the system from a soft off state by an input signal on the serial Ring Indicator (RI) line.
The choices are "Enabled" and "Disabled".

USB KB Wake-Up from S3

When "Enabled", enter any key to wake up the system from S3 state.
The choices are "Enabled" and "Disabled".

Resume by Alarm

When "Enabled", set the date and time at which the RTC (real-time clock) alarm awakens the system from suspend mode.
The choices are "Enabled" and "Disabled".

>> Bios setup utility

PnP/PCI Configurations



Reset Configuration Data

The default is "Disabled". Select Enabled to reset Extended System Configuration Data (ESCD) if you have installed a new add-on card, and system configuration is in such a state that the OS cannot boot.

Resource Controlled By

The commands here are "Auto(ESCD)" or "Manual". Choosing "Manual" requires you to choose resources from the following sub-menu. "Auto(ESCD)" automatically configures all of the boot and Plug and Play devices, but you must be using Windows 95 or above.

PCI/VGA Palette Snoop

This is set to "Disabled" by default.

INT Pin 1/2/3/4/5/6/7/8 Assignment

The choices: Auto, 3, 4, 5, 7, 9, 10, 11

Maximum Payload Size

This allows you to set the maximum TLP payload size for PCI Express devices.

The options: [128 bytes], [256 bytes], [512 bytes], [1024 bytes], [2048 bytes], [4096 bytes].

>> Bios setup utility

PC Health Status

Phoenix - AwardBIOS CMOS Setup Utility		
PC Health Status		
System Temperature	37°C/ 98°F	Item Help
CPU Temperature	34°C/ 93°F	Menu Level ►
CHASSIS FAN Speed	0 RPM	
CPU FAN Speed	0 RPM	
CPU VCore (V)	0.92V	
+12V	12.24V	
+ 5V	5.40V	
VCC (V)	1.08V	
AVCC (V)	3.32V	
VCC3 (V)	3.32V	
VBAT (V)	3.32V	
3VSB (V)	3.32V	

↑ ↓ → ←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F7: Setup Defaults

System Temperature

This shows you the current temperature of system.

CPU Temperature

This shows the current CPU temperature.

Chassis FAN Speed

This shows the Chassis FAN Speed (RPM).

CPU FAN Speed

This shows the CPU FAN Speed.(RPM)

VCore and Others Voltage

This shows the voltage of VCore, +5V, +12V, VCC(V), AVCC(V), VCC3(V), VBAT(V), and 3VSB(V).

>> Bios setup utility

Load Setup Defaults

Use this menu to load the BIOS default values that are factory settings for optimal performance system operations. While Award has designed the custom BIOS to maximize performance, the factory has the right to change these defaults to meet their needs.

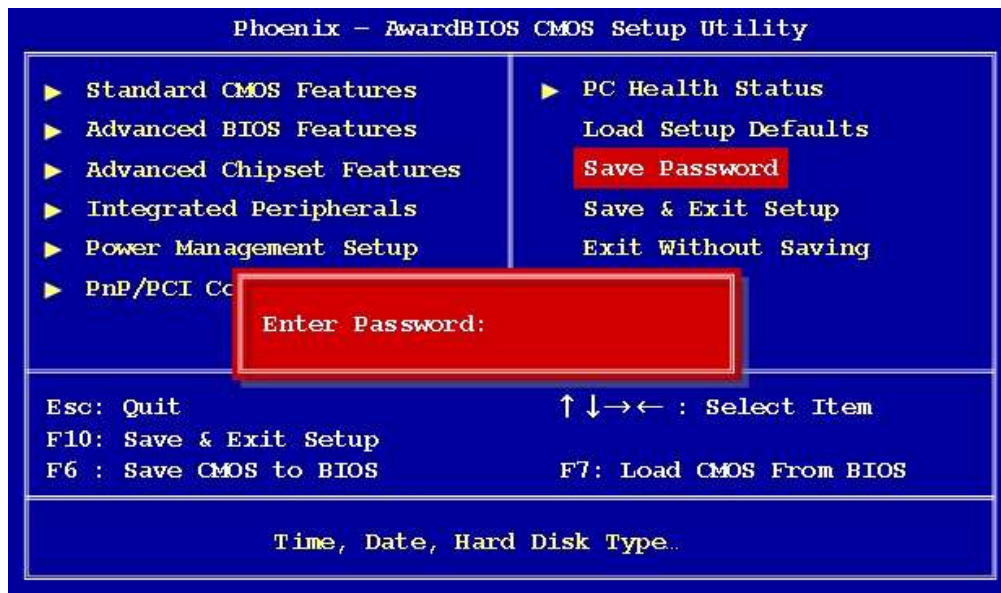
Press <Y> to load the default values setting for optimal performance system operations.



>> Bios setup utility

Set Password.

You can set password. It is able to enter / change the options of setup menus.

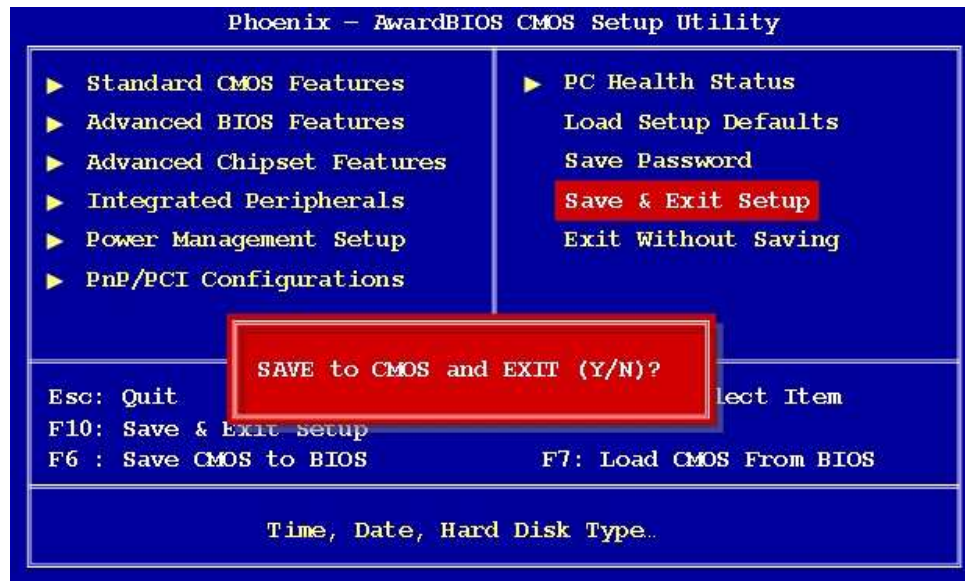


>> Bios setup utility

Save and Exit Setup.

If you select this and press <Enter>, the values entered in the setup utilities will be recorded in the CMOS memory of the chipset.

The processor will check this every time you turn your system on and compare this to what it finds as it checks the system. This record is required for the system to operate.

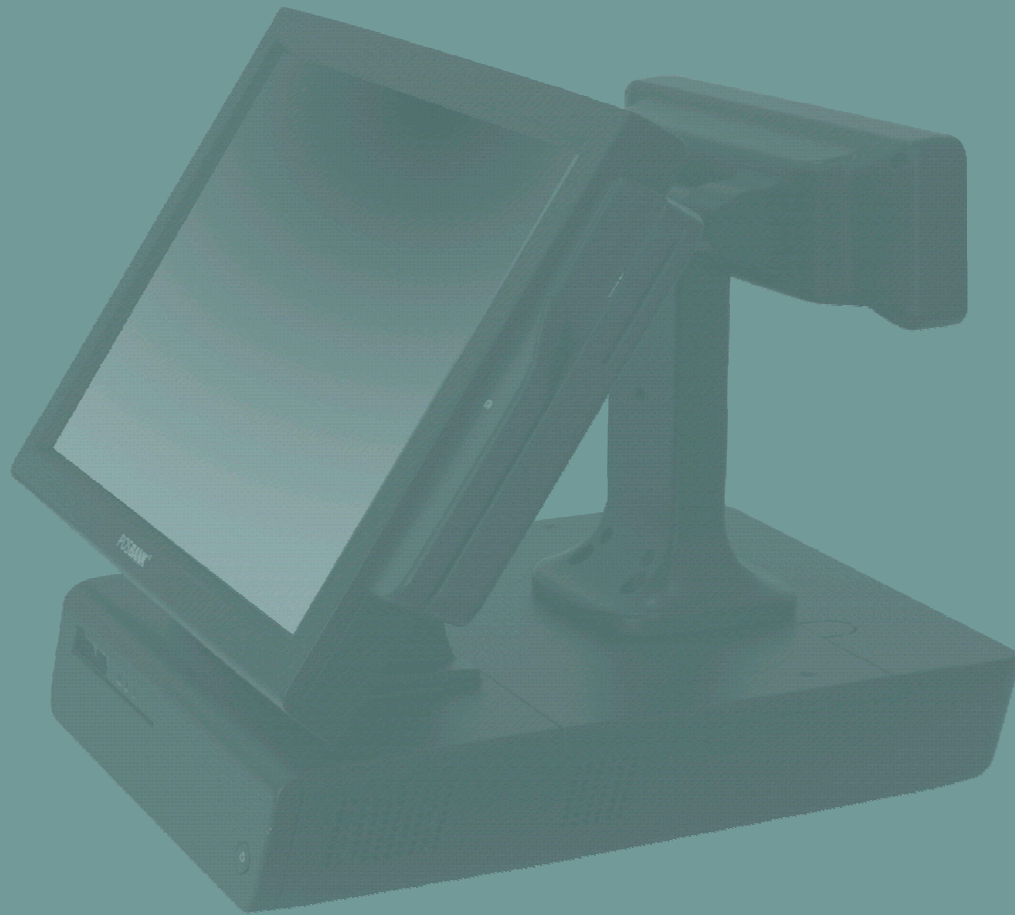


>> Bios setup utility

Exit without saving

Selecting this option and pressing <Enter> lets you exit the setup program without recording any new values or changing old ones.





Chapter 4.

Trouble Shooting

>> Trouble shooting

General checkout guidelines

Use the following procedure to troubleshoot problems:

- Identify as many symptoms as possible in detail.
- Verify symptoms by recreating them.
- Follow the corrective procedures in order.
- If you replace an FRU and the symptom remains, reinstall the original FRU before going to the next step.
Do not replace non-defective FRUs.

Power system checkout

Power system problems can result from a faulty ac adapter, or undetermined problems (such as loose connections). Refer to the following to check the ac adapter..

>> Trouble shooting

Network Symptom

Cannot access LAN

- Check hub / switch is working correctly
- Check the RJ45 cable
- Check the RJ-45 LEDs are on
- Reinstalled LAN card
- Replace main board

MSR Symptom

MSR does not response

- Check the MSR reader cable
- Check the main board to LCD cable
- Check the MSR board cable

USB Symptom

USB port does not function

- Check the ports are detected in windows device Manager
- Check the USB device
- Reinstalled USB driver
- Replace the USB device

>> Trouble shooting

Cash drawer Symptom

Cash drawer does not function

- Check the cash drawer cable
- Replace the cash drawer cable

LCD Symptom

LCd backlight is not working but text is still visible on screen

- Check the LCD cable
- Check the inverter cable
- Replace the inverter cable
- Replace the LCD panel

Touch screen Symptom

Touch screen does not function

- Check the touch screen cable
- Check the main board to LCD cable
- Check the BIOS settings

>> Trouble shooting

Power Symptom

Power shut down unexpectedly can not turn the system

- Check the A/C cable
- Check the main board power connector
- Check the CPU setting
- Check the DRAM setting
- Check the power button cable
- Replace the power supply unit

PS/2 Keyboard Symptom

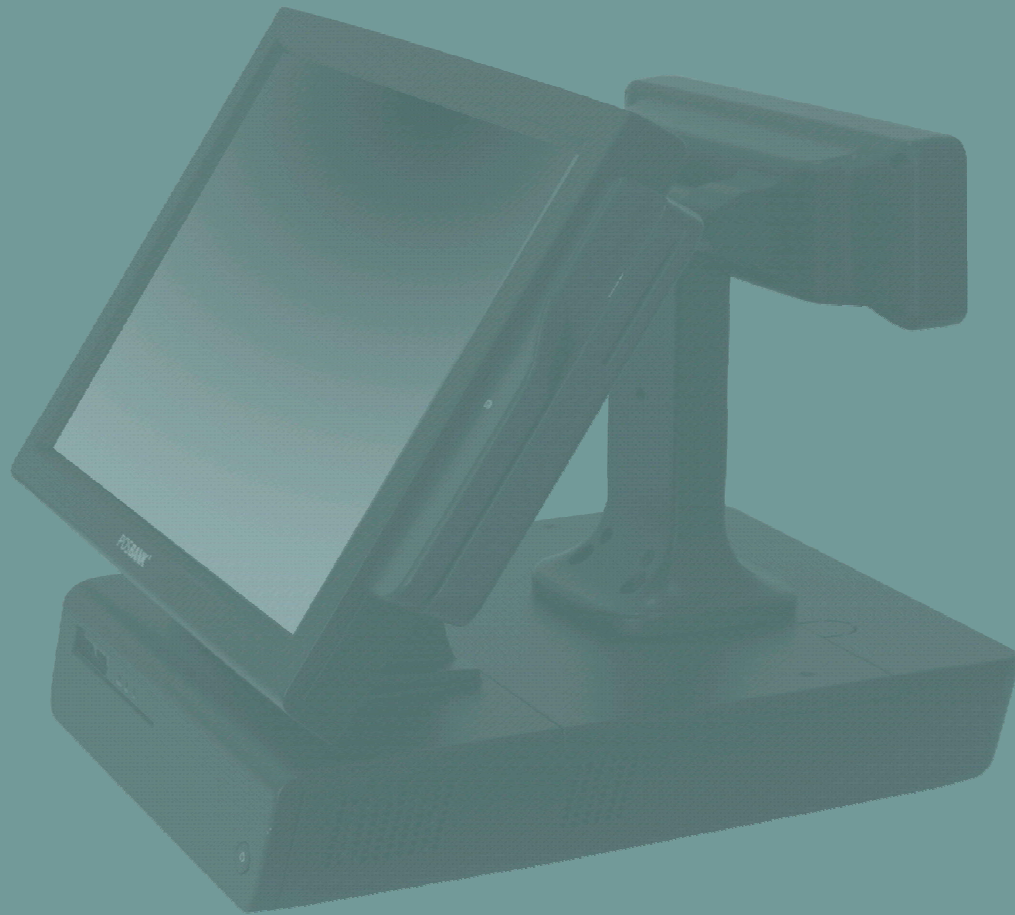
PS/2 Keyboard does not function

- Check the card reader cable
- Check jumper CN6 if there is not installed card reader

Boot Symptom

system continually reboots on power up

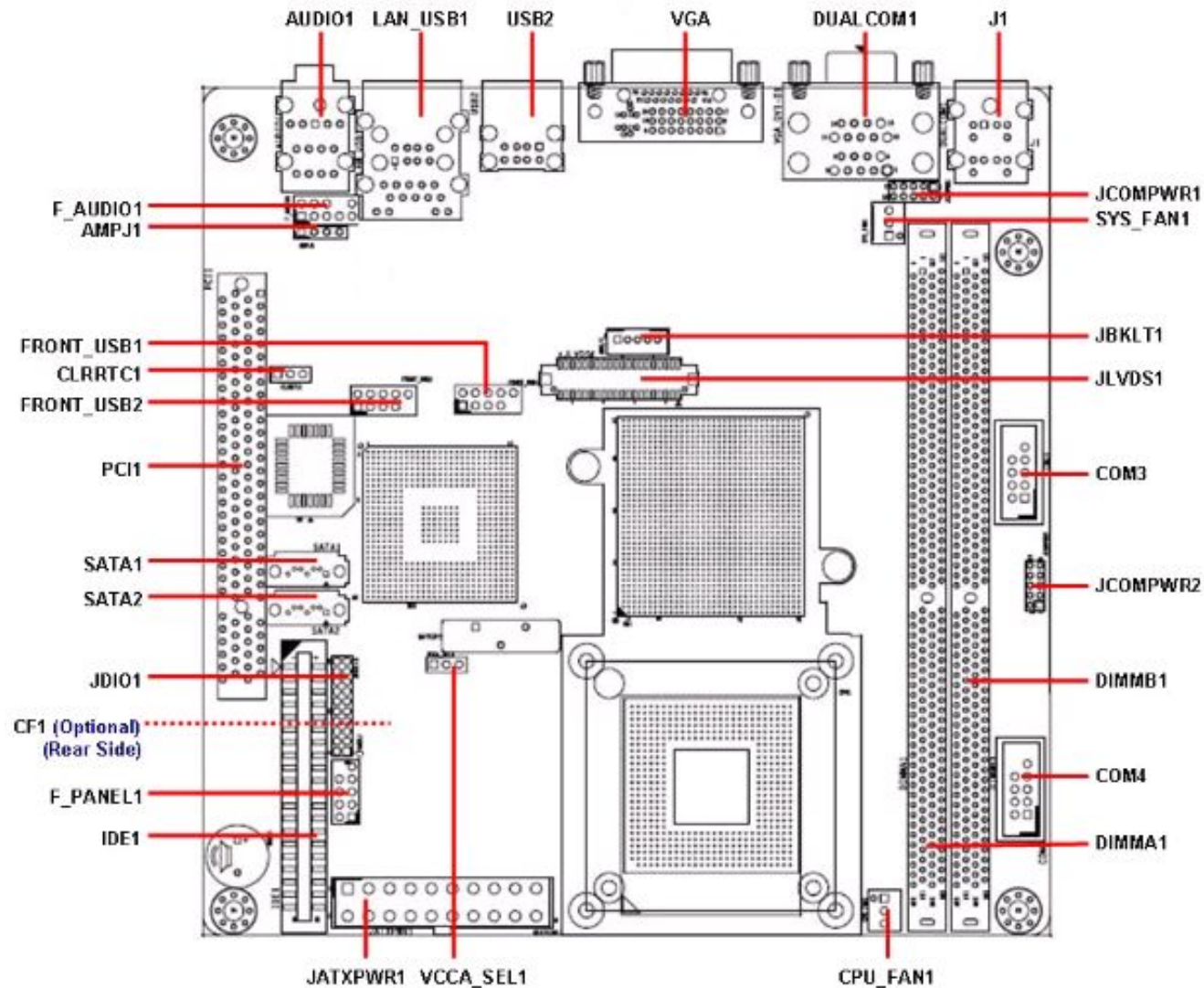
- Check the IDE cable
- Check the memory



Chapter 5.

Mainboard Jumper Setting

>> Mainboard and PCB jumper setting



>> Mainboard and PCB jumper setting method

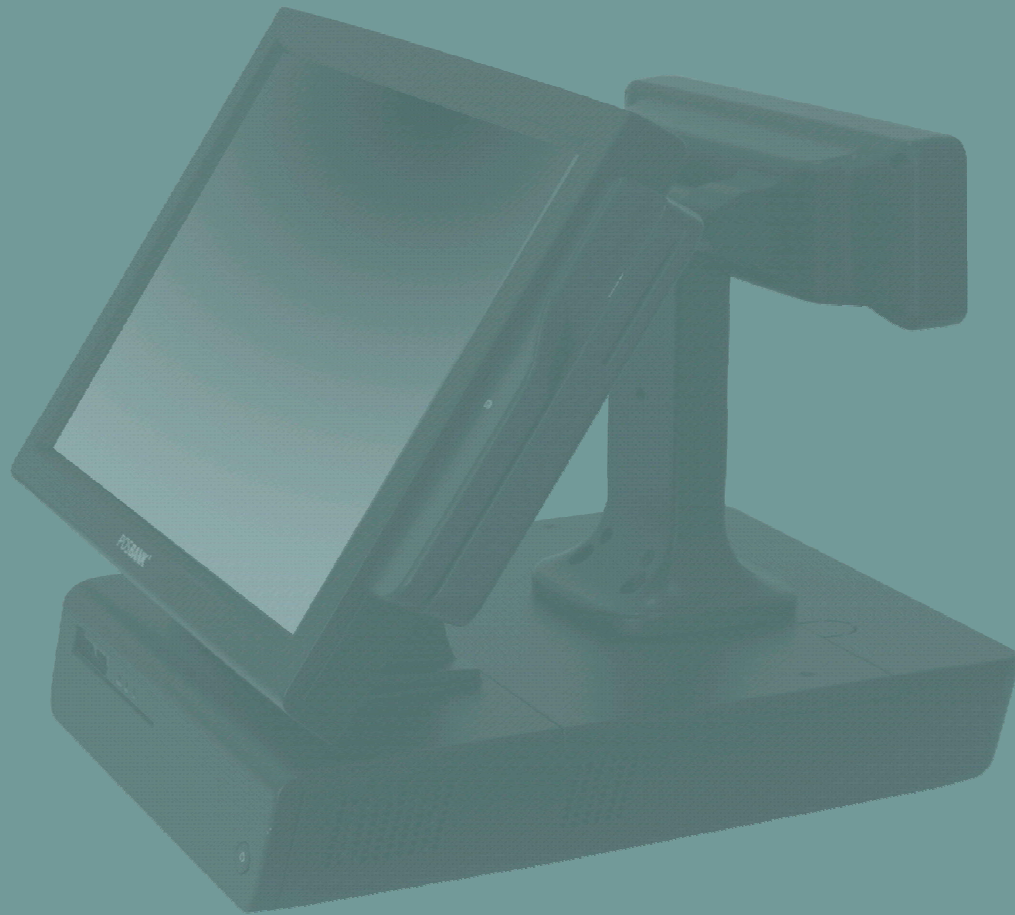
Mainboard and dip switch location description

Slots			
Label	Function	Note	
CF1	CompactFlash socket		
DIMMA1	240-pin DDR2 DIMM slot		
DIMMB1	240-pin DDR2 DIMM slot		
Jumpers			
Label	Function	Note	
CLRRTC1	Clear CMOS	3 x 1 header, pitch 2,54mm	
JCOMPWR1	COM port 1,2 RI/+5V/+12V selection	5 x 2 header, pitch 2,00mm	
JCOMPWR2	COM port 3,4 RI/+5V/+12V selection	5 x 2 header, pitch 2,00mm	
VCC_SEL1	CPU VCC Voltage Select	3 x 1 header, pitch 2,54mm	
PCI1	PCI slot		
Rear Panel Connector			
Label	Function	Note	
J1	PS/2 keyboard and mouse	6-pin Mini -Din	
DUAL COM1	Serial port connector x 2	D-sub 9-pin, male	
VGA-D1	VGA port	D-sub 15-pin, female	
LAN_USB1	RJ-45 Ethernet connector x 1 USB connector x 2		
USB2	USB connector x 2		
AUDIO	Line -in port, Line -out port, Microphone port,	6-Channel Audio I/O (3 jacks)	

>> Mainboard and PCB jumper setting method

Mainboard and deeps location description

Internal Connector			
Label	Function	Note	
AMPJ1	Amplifier connector	4 x 1 header, pitch 2,54mm	
CPU_FAN1	CPU fan connector	3 x 1 wafer, pitch 2,54mm	
SYS_FAN1	System fan connector	3 x 1 wafer, pitch 2,54mm	
COM3	Serial port connector 3	5 x 2 header, pitch 2,54mm	
COM4	Serial port connector 4	5 x 2 header, pitch 2,54mm	
F_AUDIO1	Front headphone connector	5 x 2 header, pitch 2,54mm	
F_PANEL1	System panel connector	5 x 2 header, pitch 2,54mm	
FRONT_USB1	USB 2.0 connector	5 x 2 header, pitch 2,54mm	
FRONT_USB2	USB 2.0 connector	5 x 2 header, pitch 2,54mm	
IDE1	Primary IDE connector	20 x 2 header, pitch 2,54mm	
JATXPWR1	ATX power connector	10 x 2 header	
JBKLT1	LCD Inverter connector	5 x 1 header, pitch 2,00mm	
JLVDS1	LVDS connector	HIROSE DF13S -40DP-1,25V	
JDIO	Digital I/O connector	10 x 2 header, pitch 2,00mm	
SATA1	Serial ATA connectors [black]	7-pin header	
SATA2	Serial ATA connectors [black]	7-pin header	



Chapter 6.

Replacing Parts

>> Replacing Field Replaceable Units (FRUS)

THIS CHAPTER PROVIDES INSTRUCTIONS FOR REPLACING FRUS.

THE FOLLOWING TOPICS ARE DESCRIBED.

- Safety and precautions
- Before you begin
- Replacing parts

Safety and precautions

Computer components and electronic circuit boards can be damaged by discharges of static electricity.

Working on computers that are still connected to a power supply can be extremely dangerous.

Follow these guidelines to avoid damage to the computer or injury to yourself.

- Always disconnect the unit from the power outlet.
- Leave all components inside the static-proof packaging that they ship with until they are ready for installation.
- After replacing optional devices, make sure all screws, springs, or other small parts are in place and are not left loose inside the case.
- Metallic parts or metal flakes can cause electrical shorts.



CAUTION

- Only qualified personnel should perform repairs on the SlimPOS.
Damage due to unauthorized servicing is not covered by the warranty.
- If the LCD breaks and fluid gets onto your hands or into your eyes, immediately wash with water and seek medical attention.
- Under no circumstances touch the inverter card while power is connected to the ECP-6500M.
Unplug the power cord before attempting to replace any FRU.
- To prevent static damage to components, wear a grounded wrist strap.
Alternatively, discharge any static electricity by touching the bare metal chassis of the unit case, or the bare metal body of any other grounded appliance.
- Hold electronic circuit boards by the edges only.
Do not touch the components on the board unless it is necessary to do so. Do not flex or stress the circuitboard.
Do not hold components such as a processor by its pins; hold it by the edges.

>> Replacing Field Replaceable Units

Before you begin

Make sure you have a stable, clean working environment. Dust and dirt can get into SlimPOS components and cause a malfunction.

Adequate lighting and proper tools can prevent you from accidentally damaging the internal components.

Most of the electrical and mechanical connections can be disconnected by using your fingers. It is recommended that you do not use needle-nosed pliers to disconnect connectors as these can damage the soft metal or plastic parts of the connectors.



CAUTION

To prevent scratching the case of the SlimPOS, make sure the worktop surface is clean and flat.
If you need to put the display facing down, be sure to use a foam mat.

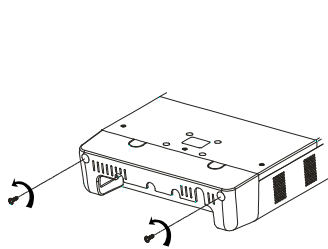
>> Replacing Field Replaceable Units

■ Replacing parts

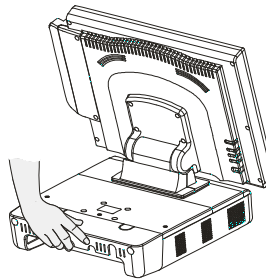
Take note of the following when replacing parts:

- If you replace an FRU and the symptom remains, reinstall the original FRU before going to the next step. Do not replace non-defective FRUs.
- When replacing a failing part, other parts that have to be removed before the failing part are listed at the top of the page.
- The arrows in the following procedures show the direction of movement to remove/replace a part, or to turn a screw or key to release a device.
- To replace a part, reverse the removal procedure.

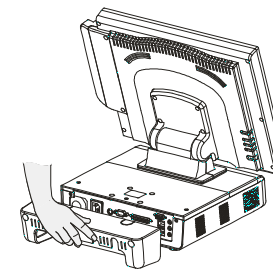
Rear cover



1. Loosen the screws by screwdriver.



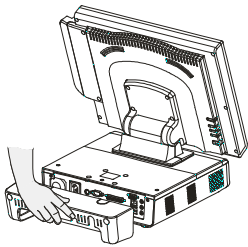
2. Pull up rear cover.



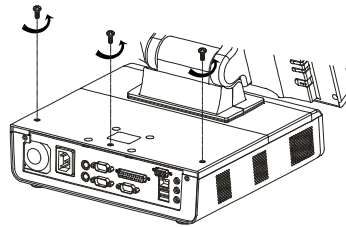
3. Separate the rear cover.

>> Replacing Field Replaceable Units

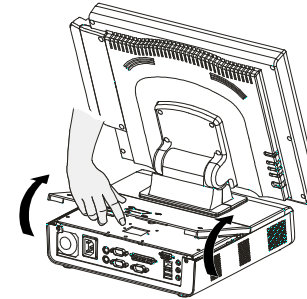
Mainboard



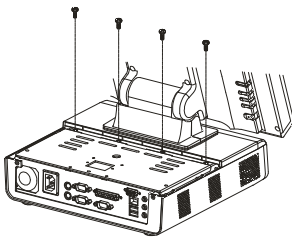
1. Remove the cable cover



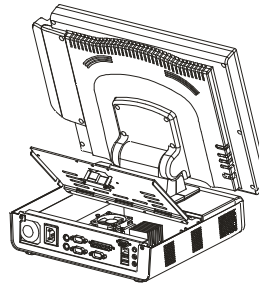
2. Loosen the 3 screws by screwdriver as described in holes



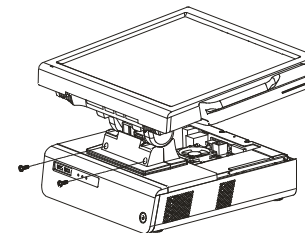
3. Remove the rear cover



4. Loosen the 4 screws



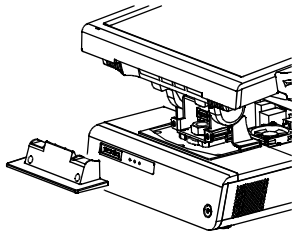
5. Remove the metal case cover



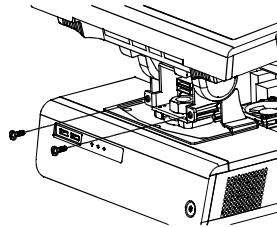
6. Loosen the 2 screws

>> Replacing Field Replaceable Units

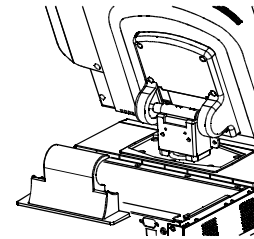
Mainboard



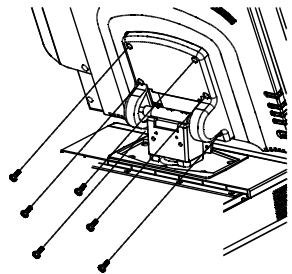
7. Remove the hinge cover



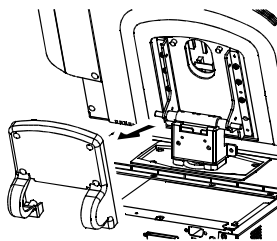
8. Loosen the 2 screws



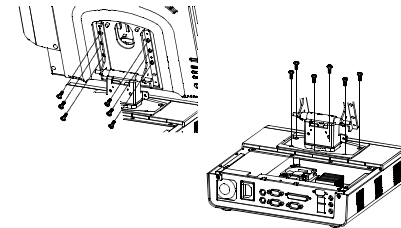
9. Remove the part as shown



10. Loosen the 6 screws



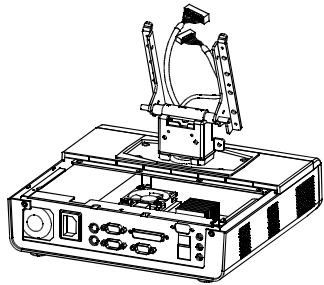
11. Remove the monitor hinge cover



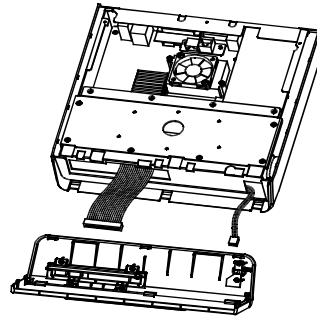
12. Loosen the 12 screws

>> Replacing Field Replaceable Units

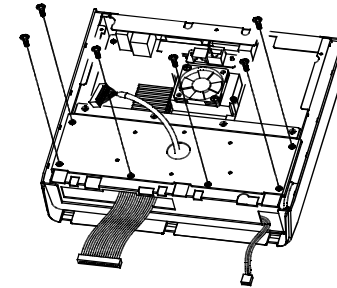
Mainboard



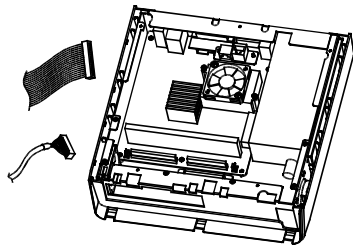
13. Disconnect the 2 monitor cable from mainboard



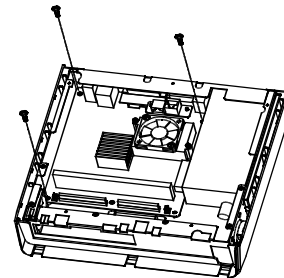
14. Remove the front cover and disconnect the 2 cables



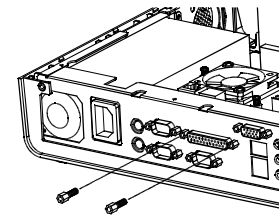
15. Loosen the 6 screws and metal cover remove



16. Remove all connectors from Mainboard.



17. Loosen the 4 screws

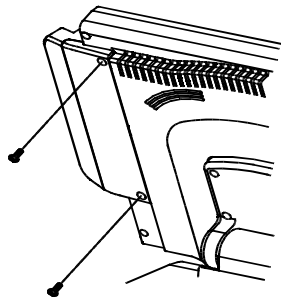


18. Loosen the 2 screws from the back I/O panel

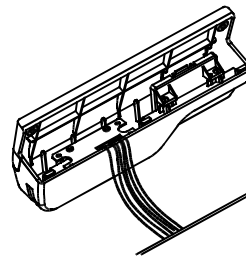
19. Remove the mainboard

>> Replacing Field Replaceable Units

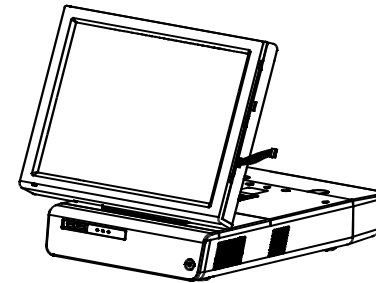
Replace MSR



1. Loosen the 2 screws



2. Disconnect the cable.



3. Separate the MSR.

4. After replace MSR, assemble in a reverse way.

>> Replacing Field Replaceable Units

Replace memory(RAM) method



1. Open the release latches



2. Remove the memory

>> Replacing Field Replaceable Units

Replace Heatsink & FAN



1. Separate the connector from the mainboard.



2. Loosen 2 screws



3. Pull up Heatsink & Fan and separate from CPU

>> Replacing Field Replaceable Units

Replace CPU



1. Remove the Heatsink



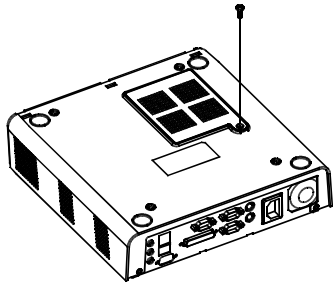
2. Turn the locking screw 180 degrees



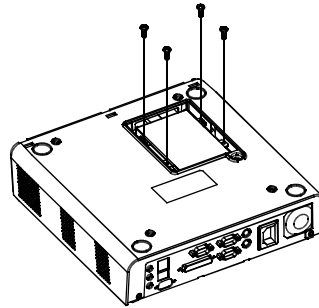
3. Remove the CPU

>> Replacing Field Replaceable Units

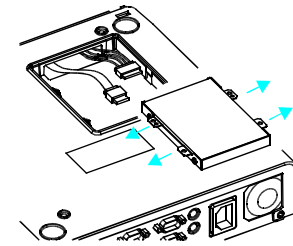
Replace HDD



1. Loosen the screw to open a HDD cover



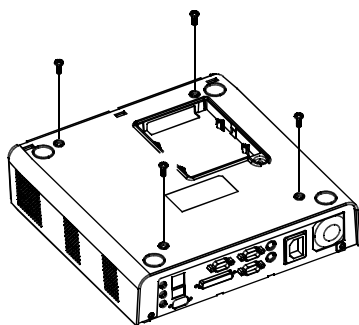
2. Release the 4 locking screws



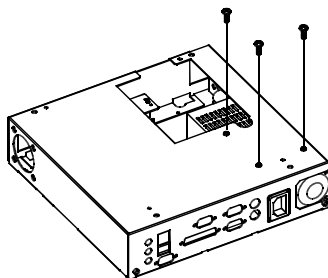
3. Disconnect the 2 cables and release the 4 screws on the side to remove the HDD

>> Replacing Field Replaceable Units

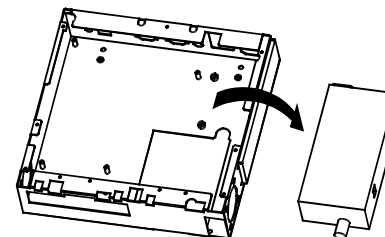
Replace Power supply



1. After remove HDD, separate bottom cover by loosen 4 screws.



2. Loosen 3 screws

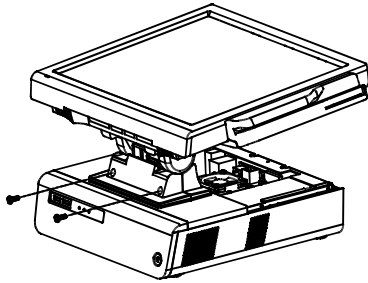


3. Remove the power supply bracket

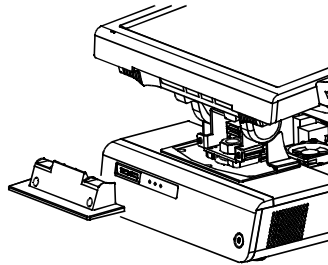
4. After replace Power supply, assemble in a reverse way.

>> Replacing Field Replaceable Units

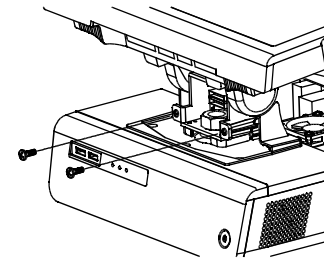
Replace Monitor



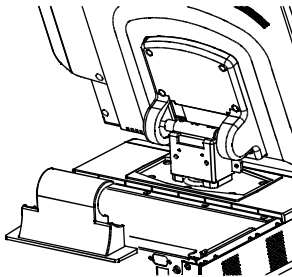
1. Loosen the 2 screws



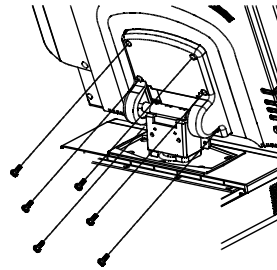
2. Remove the hinge cover



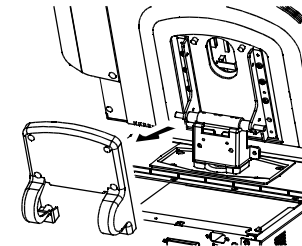
3. Loosen the 2 screws



4. Remove the part as shown



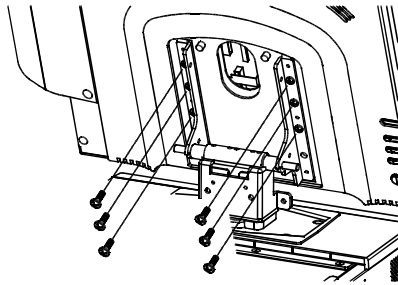
5. Loosen the 6 screws



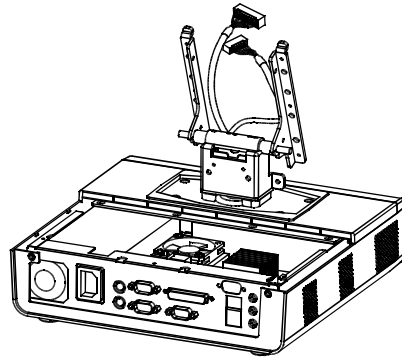
6. Remove the monitor hinge cover

>> Replacing Field Replaceable Units

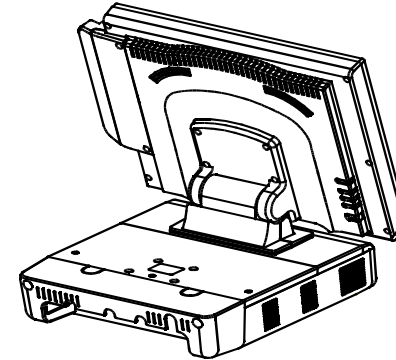
Replace Monitor



7. Loosen the 12 screws



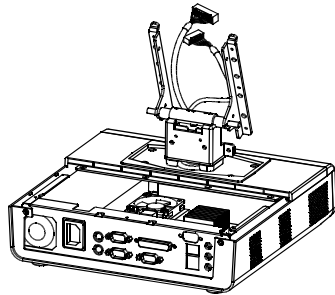
8. Disconnect the 2 monitor cable from mainboard



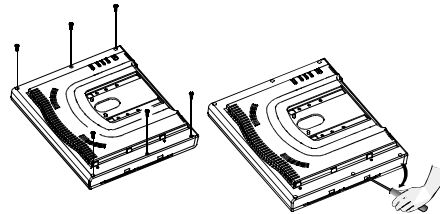
9. replace monitor

>> Replacing Field Replaceable Units

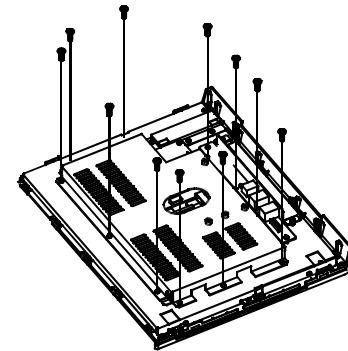
Replace Monitor board, Inverter, Touch panel, LCD Panel



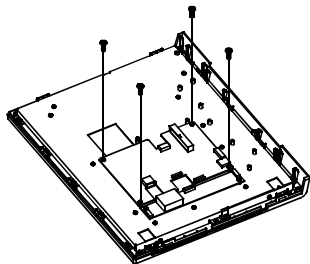
1. Separate the part



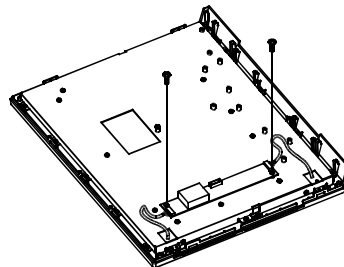
2. Loosen the 6 screws and separate the display cover



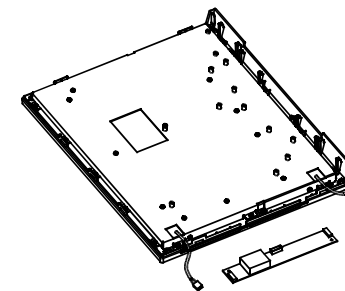
3. Loosen the 11 screws to separate the metal cover



3. Loosen the 4 screws and disconnect the cables to separate the monitor board.



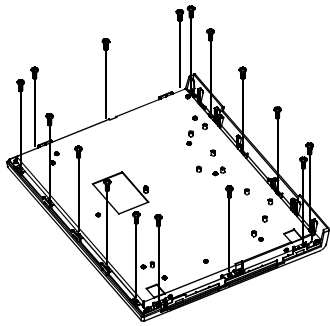
5. Loosen the 2 screws to separate the inverter



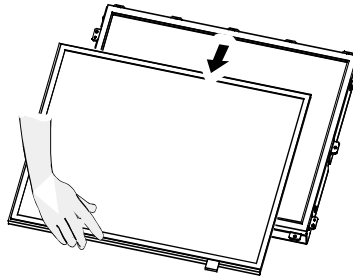
6. Disconnect the 2 cable to remove the inverter

>> Replacing Field Replaceable Units

Replace Monitor board, Inverter, Touch panel, LCD Panel



7. Loosen the 16 screws to separate LCD panel



8. Separate touch panel from LCD panel.

>> Reference to upgrade & Power supply

Reference to Upgrade

1. CPU: Intel C Mobile 1.6 GHz ~ 2.2 GHz
2. RAM: one DIMM up to 2GB DDR2 400/533 SO-DIMM
3. HDD: 2.5" SATA HDD 80GB above.

Power supply

Power Type	ATX
Operating	0 ~ 60° C (32 ~ 140° F)
Temperature Operating Humidity	0% ~ 90% relative humidity, non-condensing
Size (L x W)	6.69" x 6.69" (170 mm x 170 mm)
Weight	0.88 lbs (0.4 Kg)

>> Specification

SLIMPOS_Specification

Items	Specification
CPU	Intel C Mobile 1.5 GHz
HDD	HDD 2.5 Inch 80GB SATA
Memory	DDR2 SODIMM 512MB
VGA card	Intel 82915GV GMCH integrated Graphics Media Accelerator 900
Display	15" TFT LCD (1024×768, 5-wire resistive touch screen
Internal I/O	RS232-C port (COM4, COM5, COM6)
Standard I/O	-USB 4 ports (front:2, rear:2) -RS232-C port (COM1~3, 9 pin +5V/12V supply power) -LAN port -Audio port- PS/2 port (mouse × 1, keyboard × 1)
Expansion	Mini PCI support
Options	-MSR: Track2, Track3 support -Customer Display : (VFD Type), 20 columns x 2lines -2nd Display: 12"TFT LCD(800×600)
Power Supply	AC 110~220V (Max 230Watt)
Dimension	280(W) × 465(H) × 353(D)
O/S	Windows CE, 2000, XP, XPE, WEPOS, Linux